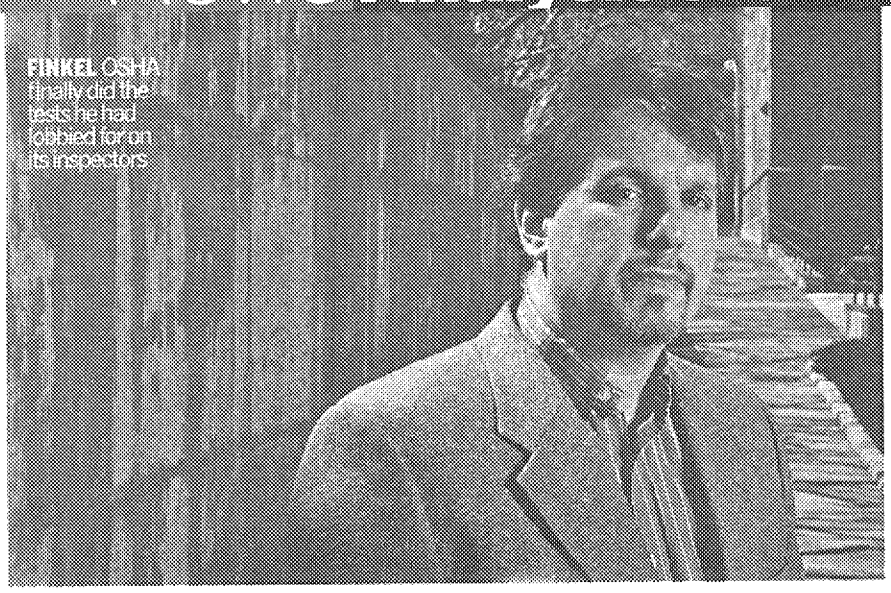


FINKEL OSHA finally did the tests he had lobbied for on its inspectors

OCCUPATIONAL SAFETY

THE 'UNRECOGNIZED EPIDEMIC'

Beryllium can be toxic to the workers who handle it. Where has OSHA been?

ADAM FINKEL NEVER planned on becoming a whistleblower. But after he told a trade reporter two and half years ago that his agency, the Occupational Safety & Health Administration, was failing to protect its own inspectors from a workplace danger, Finkel was attacked and demoted, he says—a charge OSHA disputes. So he filed a whistleblower complaint. Now, he's gaining a certain measure of vindication. The settlement of his case brought Finkel an undisclosed lump sum and keeps him on OSHA's payroll, though he says he does not speak for the agency. More importantly, the health tests that Finkel charged were being denied to OSHA's inspectors—the men and women who check American workplaces for a range of hazards—finally have been administered. And the results are disturbing: In late March, OSHA disclosed that 10 of 271 inspectors tested have been "sensitized" to the toxic metal beryllium, putting them at risk for a potentially fatal lung disease.

Since beryllium is used in an increasing number of products, from cell phones and computers to cars and golf clubs, the results have broader implications. If OSHA's own inspectors, who make brief, infrequent visits to plants, are breathing in worrisome amounts of beryllium, what about tens of thousands of workers who toil with it daily? There's overwhelming evidence, Finkel and beryllium experts say, that the current half-century-old standard for beryllium exposure is woefully inadequate. Yet OSHA has failed to tighten it. "I think OSHA is really just abdicating its responsibility," says epidemiologist David M. Michaels of George Washington University, and a former Secretary of the Energy Dept.

Not so, agency officials retort. "The agency has never stopped working on beryllium, but the process [of issuing a new standard] is difficult and cumbersome," says one top official. The agency also denies it has been lax in providing tests for its own workers. "I don't think people really understand how involved and how complex it is to set up a program like this," says another top official.

What is clear, however, is that concern is growing. There is an "unrecognized epidemic of chronic beryllium disease," says one of the nation's leading experts, Dr. Lee Newman of the National Jewish Medical & Research Center in Denver, which offers testing and treats people with the disease. "We know we are on the tip of an iceberg of the number of industries that realize they have a problem."

A SICKENING STANDARD

IN SOME WAYS, beryllium is a miracle metal—one-third the weight of aluminum yet six times stiffer than steel, and a fine conductor of electricity. It's a vital ingredient in atom bombs. But the dust is dangerous for people working with the metal. "Ounce for ounce, it is more toxic than plutonium," says Newman. A few millionths of a gram can trigger a massive attack by the immune system—which in turn can fatally damage lungs and other organs. Even smaller amounts can sensitize the immune system, setting the stage for disease. In one recent study, 31% of sensitized people developed chronic beryllium disease in an average of less than four years.

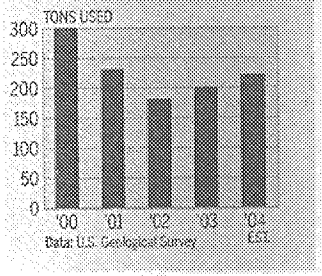
After bomb plant workers began dying of lung disease in the 1940s, two health officials hastily calculated an exposure limit for beryllium. Still the official standard, it limits workers' exposure to 2 millionths of a gram of beryllium dust per cubic meter of air, averaged over eight hours. The standard kept workers from dying after a few days or weeks on the job, but doesn't protect everyone against the chronic disease. "We know people are getting sick at the current standard," says Michaels.

That's why the Energy Dept. started a program in the 1990s to test thousands of employees in its weapons facilities, uncovering hundreds of cases of disease. It also tightened controls on beryllium exposure. Meanwhile, the American Conference of Governmental Industrial Hygienists issued a draft report this year recommending that the limit be cut to one hundredth of its current value.

Even the nation's leading producer of

GROWING PERIL

Following the tech bust, beryllium use is again on the rise



Data: U.S. Geological Survey

COPY TO FOLLOW) PHOTOGRAPH BY PETER DOYLE; CHART BY ERIC HOFFMANN/BW

beryllium, Cleveland's Brush Wellman Inc., agrees that the current OSHA standard won't keep workers' immune systems from reacting to beryllium. The limit "is not adequate to prevent subclinical [chronic beryllium disease]," a spokesman wrote in response to written questions. The company itself has adopted "an action level for airborne beryllium of 0.2 micrograms per cubic meter of air as an eight-hour time weighted average." That is one tenth the level permitted by OSHA.

With beryllium use rising, experts like Newman worry about people who make or machine things with beryllium alloys in aerospace, dental, telecom, or other industries, or who recycle products that contain the metal. Indeed, the disease has cropped up in recycling operations, among dental lab technicians, and in those who live near facilities that used the metal.

Beryllium alloys get machined in dental labs and aerospace

Aware that the standard might be inadequate, OSHA tried to push through a lower exposure limit in the 1970s. But the effort was quashed when companies protested that stricter limits would put them out of business. OSHA still hasn't managed to take action.

OSHA officials say they're on the job. "The agency has not been silent on beryllium. We put out two safety bulletins, one dealing with adverse effects on the job, one on exposure to dental hygienists," says a top official. And a new standard is coming, he insists: "The agency has been working on this for a while, and its intention is to move forward."

Unlike many whistleblowers, Finkel has done well, snaring not only the sizable financial settlement but also posts as professor at the University of Medicine & Dentistry of New Jersey and visiting professor at Princeton University. "Some days I feel like the character in *The Shawshank Redemption* 'who crawled through a river of s--- and came out clean on the other side,'" he says.

But he and beryllium disease experts worry that OSHA's delay in setting a stricter standard is putting American workers at risk. "The agency isn't doing its job of protecting worker health," he says. And, according to OSHA's own study, that may include its employees. ■

–By John Carey in Washington